

Editorial

The Trump Administration's Attacks on Regulatory Benefits

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Introduction

In recent decades, U.S. presidential administrations of both parties have relied on benefit–cost analysis as a vital tool for regulatory policymaking. Benefit–cost analysis has been widely used by both the executive branch to justify federal regulations and the courts when reviewing those regulations. This analysis has identified the large net social benefits of many environmental regulations, and it has been used to evaluate whether regulations have effectively achieved their objectives. The increased use and acceptance of benefit–cost analysis has also led to improvements in the methodology (Livermore 2014; Castle and Revesz 2019). When conducted and applied properly, benefit–cost analysis provides an objective, nonpartisan analytical framework for improving the overall quality of federal environmental regulation.

However, some of the foundations of benefit–cost analysis are currently under threat. In an attempt to protect regulated industries, the Trump administration has attempted to fundamentally alter the economic analysis of regulation, even if it means sacrificing large net social benefits in the process (Aldy et al. 2019; Thorp et al. 2019). As discussed below, these efforts have often specifically targeted environmental and natural resources regulation. Political interference in regulatory policy is certainly not a new phenomenon—for example, Ronald Reagan's Environmental Protection Agency (EPA) administrator, Anne Gorsuch, was widely criticized for exerting significant political influence during her brief tenure at the agency (Dennis and Mooney 2017)—but the breadth and depth of such interference under the Trump administration has been unprecedented. This article focuses on six inappropriate analytical techniques that have been used by the Trump administration to justify deregulatory actions: focusing on cost savings, but ignoring the resulting foregone benefits; placing substantial roadblocks in the way of regulatory agencies' ability to rely on epidemiological studies; promoting discredited threshold models, under which significant air pollutants are assumed to have no adverse effects below a certain level; calling co-benefits into question;

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downplaying climate change damages; and counting transfer payments in inappropriate ways.

Focusing on the Costs of Regulation but Ignoring its Benefits

First, the Trump administration's regulatory agenda focuses on the costs of regulation but ignores its benefits. This agenda is reflected most clearly in Executive Order 13771—*Reducing Regulation and Controlling Regulatory Costs* ([Executive Order 13771 2017](#))—which creates a regulatory budget that caps new regulatory costs at zero for fiscal year 2017 and requires that the Director of the Office of Management and Budget (OMB) set the budget for regulatory costs for each agency in the following years. The zero-cost budget for 2017 meant that agencies had to offset any costs associated with a new rule by delaying, suspending, or repealing other rules that have costs that are equivalent to those of the new rules. For both fiscal year 2017 and thereafter, the executive order does not require agencies to account for the forgone benefits and new risks the public would face as a result of the deregulatory actions.

Indeed, the administration has justified a number of its efforts to delay, suspend, or repeal Obama administration regulations, referring to only the cost savings to regulated industries and ignoring the forgone benefits to the regulations' beneficiaries (e.g., [Health and Human Services 2019](#)). Similarly, the Trump administration has attempted to justify deregulatory actions by excluding unquantified benefits, considering only those benefits for which quantification techniques are available (e.g., [Environmental Protection Agency 2017a](#)). The administration has referred to unquantified benefits as speculative, insignificant, and uncertain benefits ([Environmental Protection Agency 2017a](#)), which is inconsistent with longstanding regulatory practice ([Office of Management and Budget 2003](#)).

As part of their deregulation efforts, other administrations have also emphasized the cost burden of regulation and have proposed short-term regulatory freezes without conducting benefit–cost analysis. What is particularly worrisome about the approach taken by the Trump administration is the extent to which it focuses on costs and ignores benefits as part of its long-term strategy and that it excludes unquantified benefits in a manner that is inconsistent with established practices.

Excluding the Use of Epidemiological Studies

Second, the Trump administration has attacked the scientific studies that support the most significant health benefits of environmental regulations. Most troubling, in April 2018, the EPA, under Administrator Scott Pruitt, proposed the *Strengthening Transparency in Regulatory Science* (STRS) rule, which would prohibit the EPA from using scientific studies to justify regulation if the underlying data are not made publicly available ([Environmental Protection Agency 2018b](#)).

Historically, the EPA has used epidemiological studies extensively to develop and improve dose-response functions for a broad array of pollutants,¹ such as particulate matter and lead. However, for many epidemiological studies, the underlying data cannot be made publicly

¹These functions predict the adverse health consequences of different concentrations of a pollutant.

available, in large part because of the legitimate confidentiality concerns of the subjects of such studies. Indeed, editors of major peer-reviewed scientific journals criticized the proposed STRS rule on precisely these grounds (Thorp et al. 2019). The proposed STRS rule is also likely to have particularly pernicious impacts on studies that use data from low probability but high impact events, such as natural disasters, environmental catastrophes, wars, and terrorist attacks. This is because the replication standard included in the proposed rule could be interpreted as barring the EPA from considering any study for which the underlying data cannot be replicated in an experimental setting.

The proposed STRS rule assumes that concerns about confidentiality can be addressed through data anonymization. However, such techniques are, in fact, generally ineffective because anonymized datasets can be combined with other publicly available information to identify individuals. At the same time, when datasets are stripped of identifying information, like age, gender, and occupation, they become less useful for epidemiological research (Ohm 2010).

The most significant impact of the proposed STRS rule is the potential retroactive exclusion of a large-scale epidemiological study—the Harvard Six Cities study (Dockery et al. 1993)—and a subsequent epidemiological study by the American Cancer Society (Pope et al. 1995). These two studies are widely recognized as being the most important studies of the adverse health consequences of particulate matter in the ambient air and were the basis for the EPA's subsequent strengthening of the National Ambient Air Quality Standards (NAAQS) for particulate matter (English and Balmes 2019). However, industry groups have long attacked both studies as being “secret science,” despite the fact that they have been independently verified (Cornwall 2018). In sum, the Trump Administration has tried to erect significant barriers to regulations that are justified by epidemiological studies.

Promoting Discredited Threshold Models

Third, the Trump administration has revived the discredited argument that air pollutants regulated by NAAQS have thresholds below which they produce no adverse health effects (Castle and Revesz 2019). In some important regulatory proceedings, including the proposed STRS rule and its attempt to repeal the Clean Power Plan (the Obama administration's effort to regulate existing power plants' greenhouse gas emissions), the Trump administration has relied on threshold models to determine the adverse health effects of particulate emissions (Castle and Revesz 2019).

Since the 1970s, the EPA has used linear, nonthreshold modeling for regulating five of the six criteria pollutants regulated by NAAQS—ground-level ozone, particulate matter, lead, sulfur dioxide, and nitrogen dioxide (carbon monoxide is the exception).² These models assume that there is no concentration below which there are no adverse health effects. Although there is often scientific uncertainty concerning the precise dose–response relationships at low doses, there is a consensus that there is no scientifically based justification for using an approach other than a nonthreshold model (National Research Council 2009). Thus, the EPA has used nonthreshold models under administrations of both parties, consistent with the scientific consensus, an enormous body of literature, and the practice of other

²This is the same approach that the EPA uses for regulating carcinogens.

federal agencies. By shifting to an approach that relies on threshold models, the Trump administration's EPA has sought to reduce the estimated negative impacts of particulate emissions, thereby making deregulatory actions appear more desirable.

Excluding the Indirect Benefits of Regulation but Including the Indirect Costs

Fourth, the Trump administration has attempted to exclude from benefit–cost analyses the consideration of co-benefits (i.e., indirect positive consequences, such as reductions in particulate emissions that result from regulations aimed at reducing other pollutants, such as greenhouse gases), while continuing to consider indirect costs ([Environmental Protection Agency 2018a](#)) such as impacts other than those that are borne by the regulatory targets. However, established and well-accepted practices for conducting benefit–cost analysis require the consideration of not only the direct consequences of a regulation but also its indirect consequences, both negative and positive ([Office of Management and Budget 2003](#)).

Once again, the Trump administration's primary target concerns regulations aimed at reducing emissions of particulate matter. For example, when it removed the determination that the Obama administration's Mercury and Air Toxics Standards (MATS) rule³ was "appropriate and necessary," the EPA's benefit-cost analysis omitted the MATS rule's co-benefits ([Aldy et al. 2019](#)). In a report on the EPA's 2018 analysis of the MATS rule, the External Environmental Economics Advisory Committee (EEAC)⁴ emphasized that it is a "generally accepted understanding" that "direct benefits and co-benefits (or costs) should count on equal footing when making benefit-cost calculations" ([Aldy et al. 2019](#)).

Christopher DeMuth and Judge Douglas Ginsburg, who led OMB's Office of Information and Regulatory Affairs (OIRA) during the Reagan administration,⁵ note that "OIRA . . . recommends that agencies account for ancillary benefits as well as countervailing risks," and that "[t]here appear to be no legal, political, or intellectual . . . impediments to treating ancillary benefits and countervailing risks equally in cost-benefit analysis and regulatory design" ([DeMuth and Ginsburg 2010](#)). Indeed, there is no legitimate rationale for considering the indirect consequences of a regulation when they are negative (which the courts have required agencies to do), but ignoring them when they are positive, as the Trump administration is attempting to do.

Downplaying Climate Change Damages

Fifth, the Trump administration has attempted to roll back climate change regulation by reducing the social cost of carbon (SCC) by approximately a factor of 10,⁶ which greatly

³This rule regulates emissions of these pollutants from power plants.

⁴This independent organization, which is dedicated to providing nonpartisan advice on the state of economic science related to the EPA's work, was established following the dissolution of the EPA's EEAC.

⁵This office enforces compliance with the Executive Order requiring that the benefits of significant regulations justify their costs.

⁶The SCC is a metric designed to monetize the global climate damage from carbon dioxide emissions ([Interagency Working Group on the Social Cost of Greenhouse Gases 2016](#)).

reduces the estimated damages of greenhouse gas emissions in benefit–cost analysis and thus hides the enormous adverse consequences of such rollbacks. Indeed, under Administrator Pruitt, the EPA released a revised interim SCC estimate of between \$1 and \$6 per metric tonne of CO₂ (in 2011 dollars) for the year 2020 ([Environmental Protection Agency 2017b](#)). This estimate is significantly lower than the \$42 SCC calculated by the Obama administration in 2016 ([Interagency Working Group on the Social Cost of Greenhouse Gases 2016](#)).

To arrive at the lower value, the Trump administration made two changes to its approach for calculating the SCC. First, it raised the discount rates used to translate future consequences into a present value to 3 percent and 7 percent, in contrast to the range of rates used under the Obama administration (2.5 percent, 3 percent, and 5 percent). Second, it switched from a global to a domestic-only SCC estimate.

Many economists have argued that the use of a 7 percent discount rate is not justified, particularly because the time frame over which climate change damages occur is so long (e.g., [Tol 2018](#)). Indeed, the EPA's own 2008 proposed guidance for regulating greenhouse gas emissions, which dates back to the George W. Bush administration, suggested that a discount rate of 0.5 percent to 3 percent be used when discounting costs that will affect multiple generations ([Environmental Protection Agency 2008](#)), as is the case for climate damages. In addition, OMB's 2003 guidance for benefit–cost analysis, also adopted by the George W. Bush administration, indicated that, although a discount rate of 3 percent or 7 percent is appropriate in an *intragenerational* context, if harms are *intergenerational*, then a lower discount rate may be justified ([Office of Management and Budget 2003](#)).

It is also difficult to justify on economic grounds the Trump administration's switch from a global SCC to a domestic SCC. First, climate change involves a *global* externality—that is, greenhouse gases will affect all countries regardless of where the gases are emitted. Attempts to separate climate effects according to strict geographic boundaries will inevitably underestimate damages by ignoring international spillover effects, such as economic and political destabilization and global migration, which will have significant impacts on the United States ([Howard and Schwartz 2016](#)). Second, international cooperation is an essential component of any successful climate change plan. The United States is engaged in repeated interactions with countries that are already using a *global* estimate for the social cost of their greenhouse gas emissions ([Howard and Schwartz 2016](#)). By reverting to a *domestic* SCC estimate, which ignores the externalities of its emissions, the United States could trigger a “tragedy of the commons,” leading other countries to also ignore the spillover effects of their actions and thus ultimately making everyone worse off.

In summary, the Trump administration's decisions to raise the discount rate used to calculate the SCC and to abandon a global SCC estimate in favor of a domestic SCC estimate are not justified. These shifts lead to the benefits of greenhouse gas regulation being significantly underestimated, which causes the Trump administration's deregulatory measures to appear less harmful than they actually are.

Counting Transfer Payments in Inappropriate Ways

Finally, to justify its deregulatory decisions, the Trump administration has inappropriately treated certain transfer payments as regulatory benefits. According to longstanding practices

that reflect the consensus among economists, transfer payments are not included in benefit-cost analysis ([Office of Management and Budget 2003](#)). This is because, if a transfer payment was treated as a cost or a benefit on one side of the “ledger,” it would be offset by an equal and opposite benefit or cost on the other side of the ledger.

However, the Trump administration has been selectively counting certain transfer payments as a cost or benefit. For example, in 2017, the Department of the Interior proposed rescinding its Coal Valuation Rule ([Office of Natural Resources Revenue 2017](#)). This rule was expected to increase royalty payments from coal companies to the federal government and the states by \$80 million per year. In the economic analysis accompanying its proposal to rescind the rule, the Interior Department essentially treated the reduction in royalty payments as a benefit of rescinding the rule, despite the fact that this reduction would be a mirror image of the shortfall in revenue for the federal Treasury and the states. Although the proposal was eventually withdrawn, its benefit–cost analysis illustrates the Trump administration’s willingness to go outside accepted bounds to achieve its political objectives.

Conclusion

To date, the courts have largely rejected the Trump administration’s attempts to use benefit–cost analysis of regulations in ways that are inconsistent with established practices (e.g., [Aldy et al. 2019](#); [Thorp et al. 2019](#)). Moreover, some of the Trump administration’s methodological changes are likely to be reversed by a future administration. But even if all of the Trump administration’s inappropriate methodologies for assessing costs and benefits are ultimately rejected or reversed, they will still have caused significant harm to the health and safety of Americans during the time in which the regulations they support were in effect.

References

- Aldy, J., M. Kotchen, M. Evans, M. Fowlie, A. Levinson, and K. Palmer. 2019. *Report on the proposed changes to the federal mercury and air toxics standards*. External Environmental Economics Advisory Committee.
- Castle, K. M., and R. L. Revesz. 2019. Environmental standards, thresholds, and the next battleground of climate change regulations. *Minnesota Law Review* 103: 1349–1437.
- Cornwall, W. 2018. Critics allege EPA’s new transparency rule has hidden pro-industry agenda. *Science*. May 1.
- DeMuth, C. C., and D. H. Ginsburg. 2010. Rationalism in regulation. *Michigan Law Review* 108: 877–912.
- Dennis, B., and C. Mooney. 2017. Neil Gorsuch’s mother once ran the EPA. It didn’t go well. *Washington Post*, February 1.
- Dockery, D. W., C. A. Pope, X. Xu, J. D. Spengler, J. H. Ware, M. E. Fay, B. J. Ferris Jr, and F. E. Speizer. 1993. An association between air pollution and mortality in six U.S. cities. *New England Journal of Medicine* 329: 1753–59.
- English, P., and J. Balmes. 2019. Associations between ozone and fine particulate matter and respiratory illness found to vary between children and adults. Implications for U.S. air quality policy. *American Journal Respiratory & Critical Care Medicine* 199: 817–19.
- Environmental Protection Agency. 2008. Regulating greenhouse gas emissions under the Clean Air Act. *Federal Register* 73: 44354–520.
- . 2017a. Accidental release prevention requirements: Risk management programs under the Clean Air Act; further delay of effective date. *Federal Register* 82: 27133–44.

- . 2017b. *Regulatory impact analysis for the review of the clean power plan: Proposal*.
- . 2018a. Increasing consistency and transparency in considering costs and benefits in the rulemaking process. *Federal Register* 83: 27524–28.
- . 2018b. Strengthening transparency in regulatory science. *Federal Register* 83: 18768–74.
- Executive Order 13771. 2017. Reducing regulation and controlling regulatory costs. *Federal Register* 82: 9339–41.
- Health and Human Services. 2019. Compliance with statutory program requirements. *Federal Register* 84: 7714–91.
- Howard, P., and J. Schwartz 2016. Think global: International reciprocity as justification for a global social cost of carbon. *Columbia Journal of Environmental Law* 42: 214–94.
- Interagency Working Group on the Social Cost of Greenhouse Gases. 2016. *Technical update of the social cost of carbon for regulatory impact analysis under executive order 12866*.
- Livermore, M. A. 2014. Cost-benefit analysis and agency independence. *University of Chicago Law Review* 81: 619–88.
- National Research Council. 2009. *Science and decisions: Advancing risk assessment*.
- Office of Management and Budget. 2003. *Circular A-4, regulatory analysis*.
- Office of Natural Resources Revenue. 2017. Repeal of consolidated federal oil & gas and federal & Indian coal valuation reform. *Federal Register* 82: 36934–89.
- Ohm, P. 2010. Broken promises of privacy: Responding to the surprising failure of anonymization. *UCLA Law Review* 57: 1701–77.
- Pope C. A. III, M. J. Thun, M. M. Namboodiri, D. W. Dockery, J. S. Evans, and F. E. Speizer. 1995. Particulate air pollution as a predictor of mortality in a prospective study of U.S. adults. *American Journal of Respiratory and Critical Care Medicine* 151: 669–74.
- Revesz, R. L. 2019. Exposing the contradictions in Trump's assault on climate change policy. The Hill, November 27.
- Thorp, H. H., M. Skipper, V. Kiermer, M. Berenbaum, D. Sweet, and R. Horton. 2019. Joint statement on EPA proposed rule and public availability of data (2019). *Proceedings of the National Academy of Sciences of the United States of America* 116 (51): 25368.
- Tol, R. S. J. 2018. The economic impacts of climate change. *Review of Environmental Economics and Policy* 12 (1): 4–25.